



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/520,539	01/05/2005	Sean Mark Dalziel	CL2150 USPCT	9281

7590 09/19/2007
EI du Pont de Nemours and Company
Legal - Patents
4417 Lancaster Pike
Wilmington, DE 19898

EXAMINER

DEES, NIKKI H

ART UNIT	PAPER NUMBER
----------	--------------

1709

MAIL DATE	DELIVERY MODE
-----------	---------------

09/19/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/520,539	Applicant(s) DALZIEL ET AL.
	Examiner Nikki H. Dees	Art Unit 1709

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 January 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 January 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-2 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Schurr (WO 97/07879).

3. Schurr (p. 3 lines 18-31) teaches the following:

Further in accordance with the present invention, there is provided a process for coating a solid particle with a coating material. The process comprises the steps of metering a liquid composition comprising the coating material into a flow restrictor having an outlet end; injecting a gas stream through the flow restrictor concurrently with the metering step to create a zone of turbulence at the outlet end of the flow restrictor, thereby atomizing the liquid composition; heating the gas stream prior to injecting the gas stream through the flow restrictor; and adding a solid particle to the zone of turbulence concurrently with the metering and injecting steps to mix the solid particle with the atomized liquid composition, wherein the mixing at the zone of turbulence coats the solid particle with the coating material.

This reads on Applicants' claim 1.

Art Unit: 1709

4. Schurr states that the process is for coating solid particles, in particular, small particles such as powdery or granular materials (p. 2 lines 13-15). Schurr would have been able to clearly envisage the coating of powdered food products as listed in Applicants' claim 2.

5. Schurr also speaks to repeated passes through the process to adhere additional coating materials until the desired thickness is achieved (p. 9 lines 10-15).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-5 and 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schurr (WO 97/07879) in view of Johnson et al. (3,949,094).

8. Schurr teaches the process for encapsulating a particle with a liquid encapsulating material and then repeating this process, as discussed above in ¶ 3 and 5.

9. Schurr teaches wood rosin as a liquid encapsulating material to be used in his process (p. 13, Example 2). It is known in the art that calcium carbonate is an animal feed and wood rosin serves as a surface-modifying agent.

Art Unit: 1709

10. Schurr is silent as to the use of food particles in combination with nonfood GRAS material in his process.

11. Johnson et al. teach a process for encapsulating food particles with a lipoidal material (col. 2 lines 8-10). Johnson et al. give many examples of food particles that may be used singly or occur in mixed form in their process (all in col. 1), including titanium dioxide (line 20), baking powder (line 34), gelatin (line 32), among many others.

12. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have further encapsulated the particles taught by Johnson et al. in the process taught by Schurr to result in food particles that are of a particular size, flavor profile, and possess the desired stability properties.

13. Claims 1, 6, 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schurr (WO 97/07879) in view of Brenner et al. (3,971,852).

14. Schurr teaches the process for encapsulating a particle with a liquid encapsulating material and then repeating this process, as discussed above in ¶¶ 3 and 5.

15. Schurr is silent as to the use of a spray dried emulsion of a flavor oil as the food particle being coated.

16. Brenner et al. teach an emulsion of lemon oil that is spray dried to form a powder (col. 12, example 3). Brenner et al. go on to state that the particulates formed by their invention can be used in all products using particulate compositions including foods and beverages (col. 16, lines 6-68).

Art Unit: 1709

17. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have used the spray-dried emulsion of a flavor oil taught by Brenner et al. in the particulate encapsulating process taught by Schurr in order to result in an encapsulated flavor oil particle.

18. Claims 1, 7, 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schurr (WO 97/07879) in view of Swisher (2,809,895).

19. Schurr teaches the process for encapsulating a particle with a liquid encapsulating material and then repeating this process, as discussed above in ¶ 3 and 5.

20. Schurr is silent as to the use of an extruded emulsion of a flavor oil as the food particle being coated.

21. Swisher teaches an emulsion of an orange oil (col. 2, lines 63-68). Swisher goes on to state that extrusion of the emulsion forms solid particles (col. 3, lines 34-36). It is also noted that the particulates are well suited for use as a flavoring in dehydrated beverage products and other food products (col. 5, lines 44-52).

22. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have used the extruded emulsion of a flavor oil taught by Swisher in the particulate encapsulating process taught by Schurr in order to result in an encapsulated flavor oil particle.

Double Patenting

23. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

24. Claims 1, 8 and 9 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-10 of U.S. Patent No. 7,163,708. Although the conflicting claims are not identical, they are not patentably distinct from each other because both the patent and the application teach the encapsulation of food particles by the same process using the same liquid coating/encapsulation materials and both allow for repeating the encapsulation process with the same or different coating materials.

25. Claims 1-5 and 8-10 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-3, 5, 7, and 10-

Art Unit: 1709

12 of copending Application No. 10/523,225. Although the conflicting claims are not identical, they are not patentably distinct from each other because both applications teach the encapsulation of edible particles by the same process using the same encapsulation materials and both allow for repeating the encapsulation process with the same or different coating materials.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

26. Claims 1, 3-5, and 8-10 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-20 of copending Application No. 10/521,002. Although the conflicting claims are not identical, they are not patentably distinct from each other because both applications teach the encapsulation of edible particles by the same process using the same encapsulation materials and both allow for repeating the encapsulation process with the same or different coating materials. Additionally, 10/521,002 teaches the loading of the carrier particles that are claimed for use in the process of both 10/520,539 (claim 1) and 10/521,002 (claim 9).

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

27. Claims 1-2 and 8-10 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 13-16 of

Art Unit: 1709

copending Application No. 10/524,673. Although the conflicting claims are not identical, they are not patentably distinct from each other because both applications teach the same process for coating or encapsulation of food particles using the same materials. Additionally, both applications teach that the coating/encapsulating process may be repeated with the same or different coating materials.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nikki H. Dees whose telephone number is (571) 270-3435. The examiner can normally be reached on Monday-Friday 7:30-5:00 EST (first Friday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, D. Lawrence Tarazano can be reached on (571) 272-1515. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1709

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Nikki H. Dees
Examiner
Art Unit 1709

D. LAWRENCE TARAZANO
PRIMARY EXAMINER

A handwritten signature in cursive script, appearing to read "D. Lawrence Tarazano", written in dark ink. The signature is fluid and stylized, with a large loop at the end.